

CLAIMS

We claim:

1. An electric motor comprising:

a case;

a rotor assembly, the rotor assembly residing inside the case,
the

rotor supported by the case for both rotary and linear motion.

means for linearly translating said rotary assembly with respect
to

the case;

means for rotating the rotary assembly with respect to the case.

2. A method for operating an electric motor comprising:

energizing a translate coil, the energized coil interacting with a
rotor assembly to linearly move the rotor assembly; and

energizing a rotation coil, said energized rotation coil interacting
with the rotor assembly to rotate the rotor assembly.

3. An electric motor comprising:

a case;

a rotor assembly, the rotor assembly residing inside the case,
the

rotor supported by the case for rotary motion; and

a stator assembly residing inside the case, the stator having
unequally spaced poles to induce the motor to turn in a predetermined
direction.